

Claims

1. A smart card chip with a nonvolatile system memory (ROM, flash1), a Java Card Virtual Machine implemented in the nonvolatile system memory (ROM, flash1), a nonvolatile application memory (EEPROM, flash2), a volatile working memory (RAM) and a variables memory area reserved for global variables, the variables memory area being reserved in the volatile working memory (RAM).
2. The smart card chip according to claim 1, wherein the variables memory area can be accessed only by programs stored in the system memory (ROM, flash).
3. The smart card chip according to claim 1 or 2, wherein the variables memory area can be accessed only by programs that have been implemented in the smart card chip up to the end of completion of the smart card chip.
4. The smart card chip according to any of claims 1 to 3, wherein the variables memory area is reserved statically.
5. The smart card chip according to any of claims 1 to 4, wherein the variables memory area is reserved by access information directed directly to the working memory (RAM).
6. The smart card chip according to any of claims 1 to 5, wherein those programs can access the variables memory area that can link to the variables memory area.
7. The smart card chip according to claim 6, wherein the ability of a program to link to the variables memory area is obtained by the program having available for linking an export component on the smart card chip.
8. The smart card chip according to any of claims 1 to 7, wherein those programs are excluded from using the variables memory area that cannot link to the variables memory area.
9. The smart card chip according to claim 8, wherein the inability of a program to link to the variables memory area is obtained by the program having withheld therefrom for linking an export component of the smart card chip.

10. The smart card chip according to any of claims 1 to 9, wherein the variables memory area is reserved by a Java package (RAM package) implemented in the smart card chip.
11. The smart card chip according to claim 10, wherein the Java package (RAM package) is implemented in the system memory (ROM, flash1).
12. The smart card chip according to claim 10 or 11, wherein the Java package contains exclusively the reservation of the variables memory area.
13. The smart card chip according to any of claims 10 to 12, wherein an export component of the Java package (RAM package) containing the link information required for linking to the reserved variables memory area is not implemented in the smart card chip.
14. The smart card chip according to any of claims 1 to 13, wherein the Java Card Virtual Machine is so formed, and modified when required, that it permits the use of global variables in the volatile working memory (RAM) on the basis of the variables memory area reserved in RAM.
15. The smart card chip according to claim 14, wherein the Java Card Virtual Machine is modified such that the modifications are not qualitatively recognizable externally, in particular that the smart card chip meets a predetermined Java Card specification that the chip would likewise meet without the modifications.
16. A chip module having a smart card chip according to any of claims 1 to 15.
17. A data carrier, in particular Java Card, having a smart card chip according to any of claims 1 to 15 and/or a chip module according to claim 16.
18. A method for reserving a variables memory area in a smart card chip having: a nonvolatile system memory (ROM, flash1), a Java Card Virtual Machine implemented in the nonvolatile system memory (ROM, flash1), a nonvolatile application memory (EEPROM, flash2) and a volatile working memory (RAM), wherein the method involves implementing a Java program code in the smart

card chip by which a variables memory area for global variables is reserved in the volatile working memory (RAM).

19. The method according to claim 18, wherein the Java program code implemented is a Java package (RAM package).
20. The method according to claim 19, wherein an export component of the Java package containing the link information required for linking to the variables memory area is not implemented in the smart card chip.
21. The method according to any of claims 18 to 20, wherein an export file required for linking to the reserved variables memory area is made available only to those programs for linking that are to be able to access the variables memory area.